

projekt Świąteczne #1 - Browar na Wyżynie

- Gravity **16.6 BLG**
- ABV ---
- IBU **32**
- SRM **38.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **6 %**
- Size with trub loss **17 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **69 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **45 min** at **69C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|-----------------|-------|------|
| Grain | pale ale Viking Malt | 3 kg (49.9%) | 79 % | 8 |
| Grain | bursztynowy cookie Viking Malt | 1 kg (16.6%) | 72 % | 60 |
| Grain | jęczmień prażony Viking Malt | 0.2 kg (3.3%) | 1 % | 1000 |
| Grain | czekoladowy ciemny Viking Malt | 0.3 kg (5%) | 1 % | 1200 |
| Grain | pszeniczny Viking Malt | 0.3 kg (5%) | 81 % | 5 |
| Grain | płatki owsiane błyskawiczne | 0.6 kg (10%) | 50 % | 3 |
| Sugar | Miód gryczany | 0.5 kg (8.3%) | --- % | --- |
| Sugar | cukier | 0.111 kg (1.8%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Junga (PL) - granulát | 20 g | 60 min | 12.5 % |

| | | | | |
|------|--------------------------|------|-------|-----|
| Boil | Lubelski (PL) - granulat | 20 g | 5 min | 4 % |
|------|--------------------------|------|-------|-----|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 500 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------------------------|--------|-----------|----------|
| Flavor | Skórka pomarańczy | 100 g | Boil | 5 min |
| Spice | Przyprawa do piernika Kamis | 20 g | Boil | 5 min |
| Flavor | Skórka pomarańczy | 80 g | Secondary | 7 day(s) |